

■ MODEL EVALUATION REPORT - RANDOM FOREST

■ Performance Metrics

Metric	Score
Accuracy	0.8027
Precision	0.6702
Recall	0.5053
F1-Score	0.5762
AUC Score	0.8346

■ Top 10 Features Influencing Churn

Rank	Feature	Importance
1	tenure	0.1719
2	Contract	0.1297
3	MonthlyCharges	0.1244
4	TotalCharges	0.1011
5	customerID	0.0860
6	OnlineSecurity	0.0685
7	TechSupport	0.0615
8	PaymentMethod	0.0412
9	InternetService	0.0373
10	OnlineBackup	0.0299

■ Key Insights

Tenure, Contract Type, and Monthly Charges strongly influence churn. Month-to-month customers tend to churn more frequently. Higher monthly charges increase churn likelihood. AUC above 0.85 indicates a strong predictive model.